

REMARKS

Claims 1-19 are currently pending in the present patent application. Reconsideration and allowance of the application is respectfully requested in view of the following remarks. Claims 1, 12 and 17 have been amended for pointing out the essence of the invention.

Claim rejections – 35 USC §103

In paragraph 1 of his report, the Examiner rejected claims 1-2, 4-9, 11-17 and 19 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,708,031 (hereinafter called Purnadi) in view of U.S. Patent No. 6,580,699 (hereinafter called Manning).

The invention of claim 1 is a method for handing-off a dormant Mobile Node (MN) to a target packet zone in an IP-based Code Division Multiple Access (CDMA) cellular telecommunications network. The target packet zone comprises a Packet Data Service Node (PDSN) and a Base Station Controller with a Packet Control Function (BSC/PCF). The method transmits from the dormant MN to the BSC/PCF an origination request message comprising an indication that the MN is dormant. Next, responsive to a receipt of the origination request, the method sends from the BSC/PCF to the PDSN a registration request message that includes an indication of an identity of the MN and an indication that the MN is dormant. The method further transmits from the PDSN to the BSC/PCF a registration reply. The registration reply comprises an indication for requesting the BSC/PCF to set up a traffic channel between the BSC/PCF and the MN and for informing the BSC/PCF that the PDSN has packet data ready to be sent to the MN. Upon reception of the registration reply, the BSC/PCF proceeds with the establishment of a traffic channel with the MN.

Purnadi refers to a method for performing a handoff of a user equipment in a communications network. The communications network comprises a serving base station/packet core function (BSC/PCF) and a target BSC/PCF and a wireless gateway (WGW) for providing packet data services to the user equipment following a handoff. After roaming from a serving packet zone to a target packet zone, the user equipment accesses the network by sending an origination message that comprises a packet data service

option for notifying the BSC/PCF that the user of the equipment has subscribed to packet data services in the communications network. The target BSC/PCF further establishes a traffic channel with the MN and uses the service option for providing to the user equipment the packet data services requested (figure 6). Ultimately Purnadi establishes a Point-to-Point (PPP) connection between the user equipment and the WGW.

However, Purnandi does not disclose nor teach a method and a telecommunications network that sends an origination request message comprising an indication that the MN is dormant. Purnandi merely sends an origination message for requesting packet data services. Since Purnandi does not disclosed an indication that a MN is dormant. Purnadi cannot disclose the sending of such an indication in a registration request from a BSC/PCF to a WGW. Consequently, Purnadi does not disclose or teach a registration reply that comprises *an indication for requesting the BSC/PCF to set up a traffic channel between the BSC/PCF and the MN and for informing the BSC/PCF that the PDSN has packet data ready to be sent to the MN*. Purnadi does not disclose or teach a set up of a traffic channel. Purnadi merely relates to a service option for notifying the BSC/PCF that the user of the equipment has subscribed to packet data service and a PPP connection establishment between a user equipment and a WGW following a handoff of the user equipment.

Manning relates to a system and method for maintaining and establishing an R-P connection after a mobile station (MS) roams from the control of an old BSC to a new BSC. Manning allows storing packet data session information including information about the first R-P connection and an associated PDSN when the MS is in the first radio network. The stored information is transferred to the second BSC when the MS moves into the second radio network, thereby allowing the second radio network to packet data serving node (PDSN) to update the first R-P connection. The method also comprises the steps of registering the MS with the second BSC when it moves into the second radio network. When the PDSN sends data packets to the old BSC on the existing R-P connection, the old BSC initiates a Paging process by sending a BS Service Request message to a mobile switching center/visitor location register (MSC/VLR) for locating the MS. Next, the MSC/VLR sends a Paging Request message to start a mobile terminated packet data call setup process. Following this, the new BSC pages all MSs under its

coverage in a paging message and the MS responds to the new BSC through a paging response message since it is now in the coverage area of the new BSC. Afterwards, the new BS acknowledges the communication with the MS by sending a Base Station Ack Order message to the MS. Following an exchange between the new BSC and the MSC/VLR, a traffic channel is established between the MS and the BSC.

However, Manning does not disclose or teach an origination message sent from an MS to a BSC that comprises an indication that a Mobile Node is dormant. Furthermore, Manning does not describe a *PDSN that transmits to a BSC/PCF a registration reply that comprises an indication for requesting the BSC/PCF to set up a traffic channel between the BSC/PCF and MN that is currently dormant and for informing the BSC/PCF that the PDSN has packet data ready to be sent to the MN*. Manning merely discloses that a traffic channel is set up (step 168 and 208). But, in Manning, the set up of the traffic channel is the result of Paging requests and Paging responses (steps 156, 158, 160, 162 and 164) between the MS, the new BSC and the MSC/VLR. As a consequence, the traffic channel of Manning is not established *upon reception of a registration reply that comprises an indication for requesting the BSC/PCF to set up a traffic channel as claimed*.

Briefly, since Purnadi and Manning do not describe whole or parts of the claimed invention, Purnadi and Manning cannot be combined for rendering obvious the invention of claim 1. Claim 12 is a system claim, which comprises similar limitations as described in claim 1. Therefore, claim 12 is believed patentable for the same reasons provided in support of claim 1. Also, it can be appreciated that the claims 2, 4-9, 11, 13-17 and 19, which depend directly or ultimately from claims 1 and 12 while adding further limitations thereto, are believed patentable for the same reasons provided in support of independent claims 1 and 12. For these reasons, Applicants kindly request withdrawal of the rejection.

In paragraph 2 of the of his report, the Examiner rejected claims 3, 10, 18 under 35 U.S.C. §103(a) as being unpatentable over Purnadi in view of Manning, and further in view of Abrol (US Publication 2002/0068570).

Abrol relates to a method for performing seamless handoff of a mobile station (MS) between Radio Access Networks (RANs) that use different types of wireless interfaces.

Page 10 of 12

09/783,968

8400 Decarie Boul.
Montreal, QC H4P 2N2 CANADA

Tel: 1-514-345-7900 ext. 6467
Fax: 1-514-345-7929

Upon moving from the coverage area of a first RAN using a first wireless interface to the coverage area of a second RAN using a second wireless interface, the MS determines whether routing ambiguity may result from the change of RAN and, based on the determination, triggers a re-registration of its network address. For doing so, when the MS leaves the coverage area of a first RAN and enters the coverage area of a second RAN, the MS decodes the overhead messages broadcast by the base stations in the second RAN. The second RAN overhead messages contain a different PZID than that broadcast by base stations in RAN. When the MS detects the change in the PZID, it sends a "fake origination" that contains the IMSI of the MS, a data ready to send (DRS) field, and a PREV_PZID field. Since, the origination is primarily for route updating purposes, the DRS field is set to 0, indicating that the MS does not have packet data to send (Paragraph [0035]).

However, Abrol does not disclose or teach a method for establishing a traffic channel between a BSC/PCF and a Mobile Node. For that reason, Abrol cannot possibly set up a traffic channel between a BSC/PCF and a Mobile Node (MN) based on the reception registration reply sent from a PDSN to a BSC/PCF that include *an indication for requesting the BSC/PCF to set up a traffic channel between the BSC/PCF and the MN and for informing the BSC/PCF that the PDSN has packet data to be sent to the MN.*

Briefly, since the combination of Purnadi, Manning and Abrol do not render obvious the invention of independent claims 1 and 12. It can be appreciated that the combination of Purnadi, Manning and Abrol cannot possibly render the invention of independent claims 1 and 12. Furthermore, since claims 3, 10, 18 depend directly or ultimately from claims 1 and 12 while adding further limitations thereto, are believed patentable for the same reasons provided in support of Independent claims 1 and 12. For these reasons, Applicants kindly request withdrawal of the rejection.

In view of the abovementioned remarks, Applicants respectfully request favourable action for all pending claims.

CONCLUSION

In view of the foregoing, Applicants submit that the present patent application is now in condition for favourable action. Should the Examiner wish to further discuss the present response or patent application, the undersigned can be reached at (514) 345-7891.

Respectfully submitted,

Date: December 20, 2004

S. Beauchesne

Sandra Beauchesne

Reg. No. 43,422